

Notice of Allowability

Application No.

09/803,718

Examiner

Jean A. Gelin

Applicant(s)

NARASIMHAN ET AL.

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/9/05.
2. ☒ The allowed claim(s) is/are claims 1-53 and 55-61, renumbered as 1-60.
3. ☒ The drawings filed on 09 March 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This is in response to the Applicant's amendments and arguments filed on May 09, 2005 in which claims 1-61 are currently pending.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jerry L. Mahurin (Reg. No. 34,661) on July 22, 2005.

3. The application has been amended as follows:

Please cancel claim "54".

Please rewrite claim 53 as follow:

--A method for mobile data communication comprising: transmitting from a base station to mobile stations in a time division access scheme using multiple beams; and switching, over time, a forward link time slot assignment of said time division access scheme of each of a plurality of subscriber units, wherein said switching a forward link time slot assignment comprising: transmitting to said plurality of subscriber units each within a different time slot of said time division access scheme; and varying from transmission frame to transmission frame in a pseudo random sequence the time slot within which transmission is made to said subscribers.--

Allowable Subject Matter

4. After a further search and thorough examination of the present application and in view of the applicant's arguments and Examiner's amendment, claims 1-53 and 55-61, renumbered as 1-60, are found to be in condition of allowance.

5. The following is an examiner's statement of reasons for allowance:

As per claims 1-20, the cited prior arts fail to teach the claimed limitations for the reasons set forth in the Applicant's remark filed on 05/09/05 page 16.

As per claims 21-52 the prior art teaches the use of smart or adaptive antennas to transmit beams directed at an individual, beams can be chosen to be as small as possible to provide the desired or necessary power to subscriber, and control the quality of signals.

On the other hand, the Applicant teaches determining a data rate for providing desired communication quality with subscriber units of said combination of subscriber units achievable when said interference diversity gain scheme is implemented; and providing said simultaneous substantially isolated communication links between subscriber units of said combination of subscriber units and said base station and providing therein data communication at an associated one of said determined data rates.

As per claims 53, 55-61, the prior arts of record fail to teach switching, over time, a forward link time slot assignment of said time division access scheme of each of a plurality of subscriber units, wherein said switching a forward link time slot assignment comprising: transmitting to said plurality of subscriber units each within a different time

slot of said time division access scheme; and varying from transmission frame to transmission frame in a pseudo random sequence the time slot within which transmission is made to said subscribers

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Peterson et al.	US 6,072,788	06/06/2000
Wong et al.	US 6,330,460	11/12/2001
Katz	US 6,771,989	08/03/2004

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JEAN GELIN
PRIMARY EXAMINER

JGelin
July 23, 2005

Jean Allond Gelin